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June 6, 2008

Transportation Innovative Finance

Rhode Island

Presentation Overview

- The Problem
- Credit tools
- Value Capture
  - Tolling
  - Congestion Pricing
  - Alternative Revenues

The Costs of Congestion

The financial cost of congestion:

- 3.7B hours of delay and 2.3B gallons of wasted fuel annually*
- Almost $200B after accounting for unreliability, inventory, and environmental costs across all modes**

Congestion hurts family and civic life, impacting:

- Where people live and work
- Where they shop
- How much they pay for goods and services

Congestion on I-95 in Northern Virginia

* Texas Transportation Institute, 2005 Urban Mobility Report
** USDOT internal analysis

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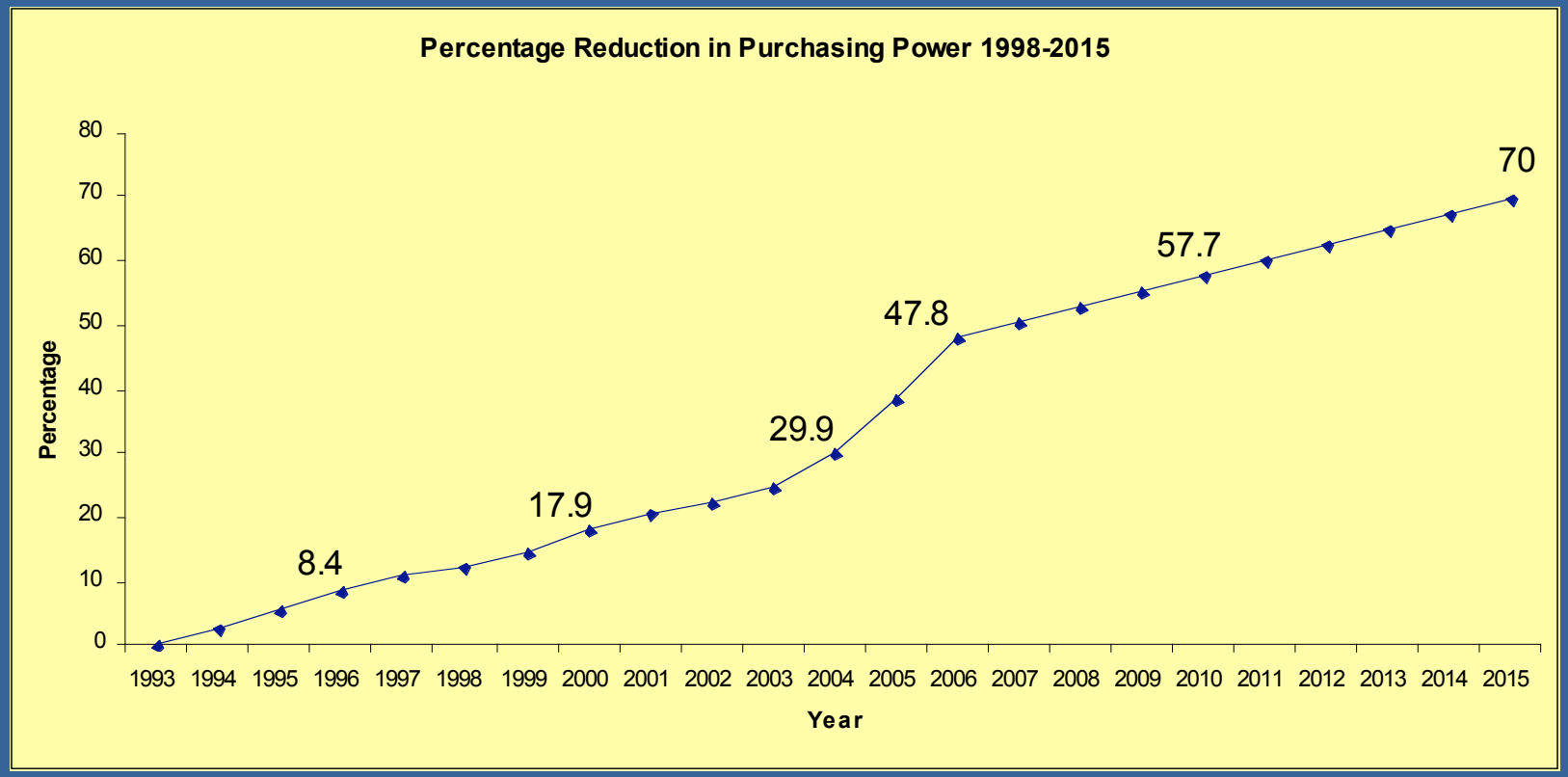
Impact of Inflation



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Sep-15 Program

Allows for new approaches to be tried

- Contracting
- Compliance with environmental requirements
- Right-of-way acquisition
- Project finance

FHWA must be able to carryout stewardship responsibilities

Apply at FHWA division

http://www.fhwa.dot.gov/ppp/sep15.htm

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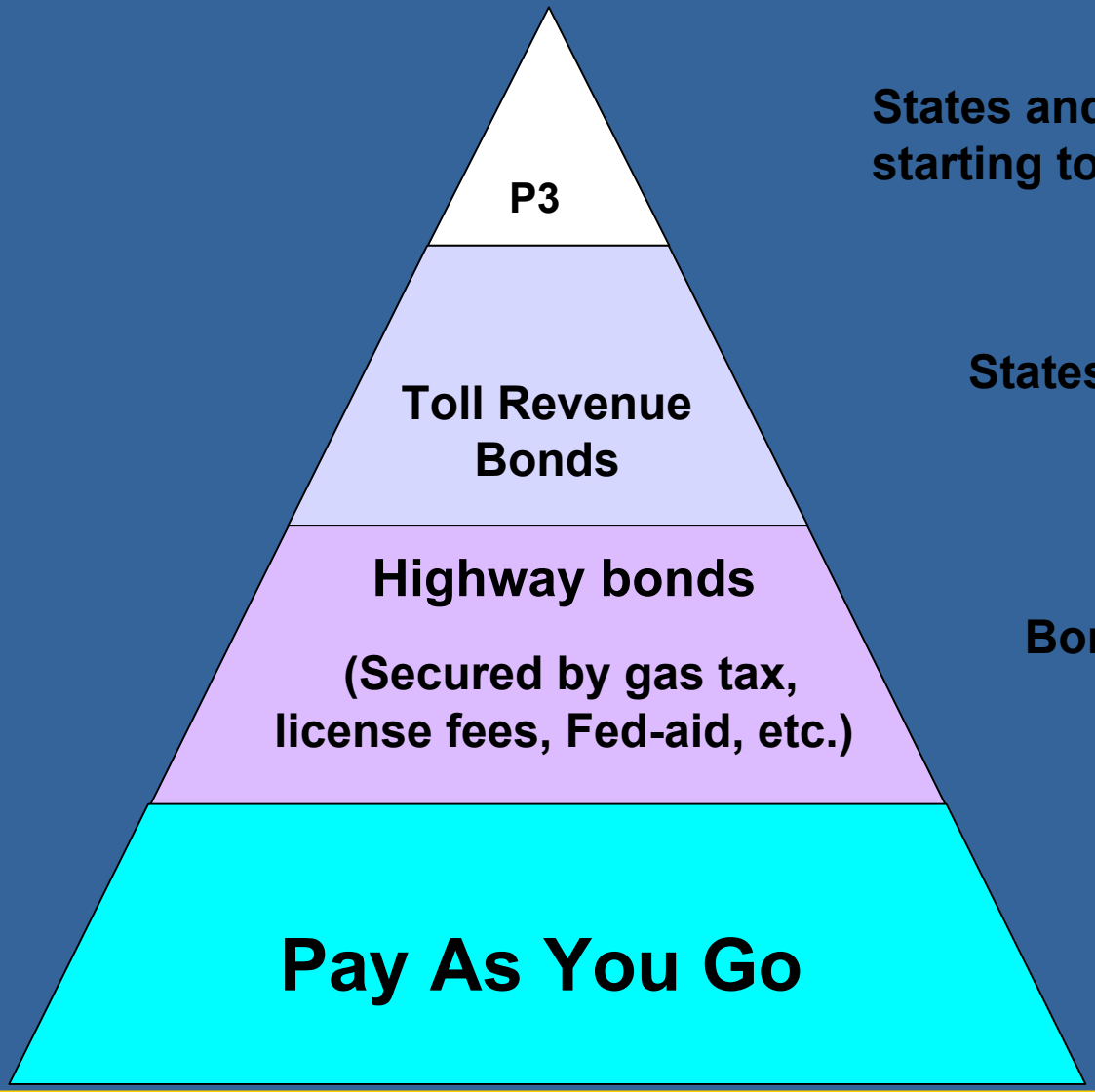

States and local governments starting to access private capital

States starting to rely on tolls

Bonding expands Program

State and Federal user tax Is the foundation of transportation system

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CREDIT TOOLS

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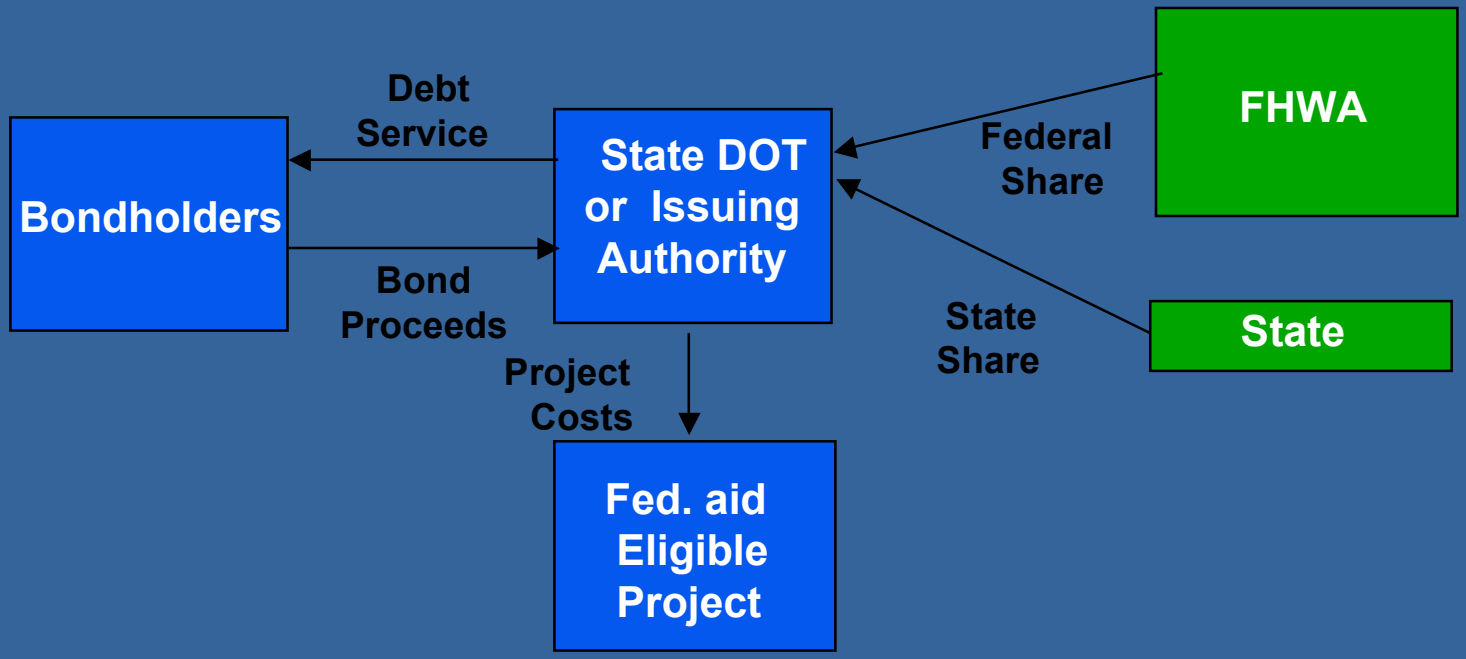
GARVEEs: Flow of Funds



What Is A Private Activity Bond (PAB)?

PABs are debt instruments issued by states or local governments where bond proceeds are used to benefit a private person or company

- Taxable
  - Interest from the debt is taxed as Federal income
- Tax-exempt
  - Interest is not taxed as Federal income

Tax-exempt PAB

SAFTEA-LU

$15 billion qualified tax-exempt facility bonds

- Projects must receive Federal assistance under Title 23 or Title 49
- Qualified highway and surface transportation facilities
  - Any Title 23 surface transportation facility
  - International bridge and tunnels
  - Rail/truck transfer facilities
- Secretary of transportation responsible for allocation
  - Application

Tax-exempt PAB

Advantages

- Private capital leveraging
- Lower Interest costs
- Longer maturities
- Efficiency of private and public sectors
- Access to equity markets

TIFIA Eligibility Requirements

Major requirements

- Surface transportation projects ($50M generally, $15M for intelligent transportation systems – ITS)
- TIFIA contribution limited to 33 percent
- Senior debt must be rated investment grade
- Dedicated revenues for repayment
- Applicable Federal requirements (Civil Rights, NEPA, Uniform Relocation, Titles 23/49)
- Public or private highway, transit, rail and port projects are eligible to apply for TIFIA assistance

Credit Facility

Direct loan (35 years), line of credit (10 years) or loan guarantee

State Infrastructure Bank

Revolving fund established by states

- Federal-aid and state dollars

Provides loans, lines of credit, and other forms of credit assistance to eligible surface transportation projects

SAFETEA-LU -10% of major funding categories can be used to capitalize SIBs.

- 25% state match

Section 129 Loans

Section 129 of Title 23, United States Code also permits states to lend Federal-aid highway funds to projects

Repayment-Dedicated, non-Federal source required

Limited to bridges, tunnels, and highway facilities

SIB/Section 129 Common Elements: Eligible Borrowers

Note: Eligibility attaches to project, not borrower

- Local governments
- Local transportation authorities
- Nonprofits
- Private industry:
  - Railroads
  - Shippers
  - Developers

Appeal of SIB/Section 129 Loans to Borrowers

Similar to TIFIA:

- Low interest rate (below market)
- Long terms (max loan term 30 years)
- Seed funding -- repayments don't have to begin until 5 years after construction
- Possibly more lenient underwriting (for public purpose projects)

SIB Examples: Price Corridor, Chandler, AZ

- Acceleration of 2.7 miles of Maricopa freeway important to Chandler's economic development.
- $26 m short term loan from SIB
- Chandler & private developer together pay interest on loan
- Thus, a public private partnership, enabled by a SIB loan, accelerated a transportation project

Section 129 Example:
Stark County Intermodal Facility, OH

Transfer yard where truck trailers & containers are loaded onto railcars

$32 m project-- $7m Section 129 loan; $25m private sector.

Truck off-loading fees will repay loan

As the loan is repaid, funds can then be loaned for future CMAQ projects

The facility increases mobility by serving as an interchange between rail and highway, increasing freight capacity, and reducing truck travel through three non-attainment metropolitan areas

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Value Capture

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What Is Value Capture?

- Extracting revenues in exchange for benefits
- Provides leverage
- Alternative funding

Why look at value capture

Demand versus funding

- Revenue collection down
- Major Projects ?

What Do I Mean By Leverage?

- Funds other than state or federal transportation dollars
- Sources: Users, cities, counties, business, landowners etc
- Think as entrepreneur

Direct Community Benefits

- Safety
- Time Savings
- Increase economic base
- Increase sales tax
- Increase in Transient Occupancy tax
- Decrease in cost of goods and services
- Increase property values

Value of Highway Benefits

- $1 billion creates 47,000 jobs
- 1990's annual rate of return was 17%
- Transportation accounts for 5% GDP

Why is this Important?

- Substantial benefits
- How do we capture them?
- Revenue = Alternative financing

Project Selection

- Not all projects provide benefits for value capture
- Must target projects with high economic benefits
- Funding priorities given for local leverage?

Value capture Revenue Sources

- Concessions
- Sales tax
- TOT tax (room tax)
- Property benefit assessments
- Tax increment
- Developer mitigation fees
- Air rights

Alternative Funding Source

- Local Assessment bonds
- Local tax allocation bonds
  - Pledge of tax increment
- Local Revenue bonds
  - Pledge of revenue or combination

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City of Reno ReTRAC

Case Study

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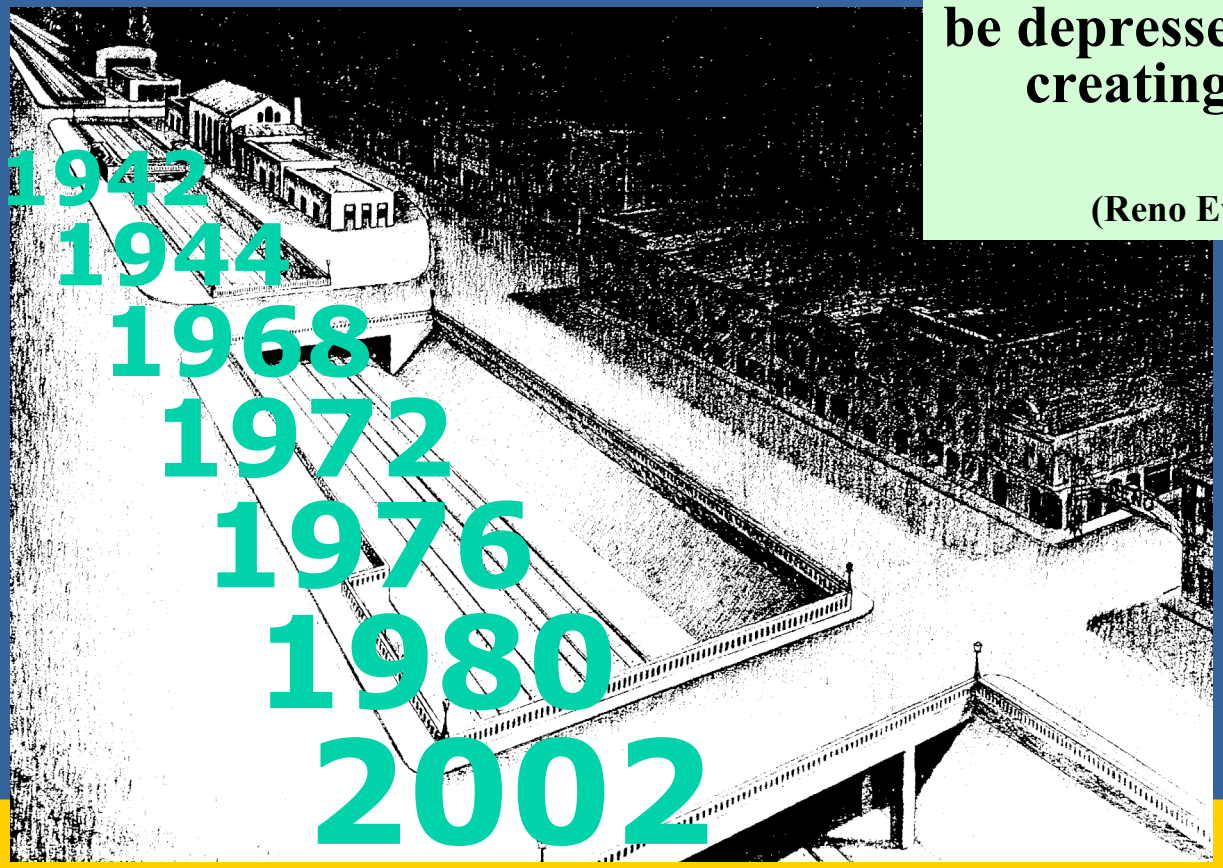
The Problem: The City of Reno was built around the transcontinental railroad in 1865.

The City Engineer promptly recommended that the tracks be depressed instead, to avoid creating a barrier through the city.

(Reno Evening Gazette, June 8, 1938)



circa 1938

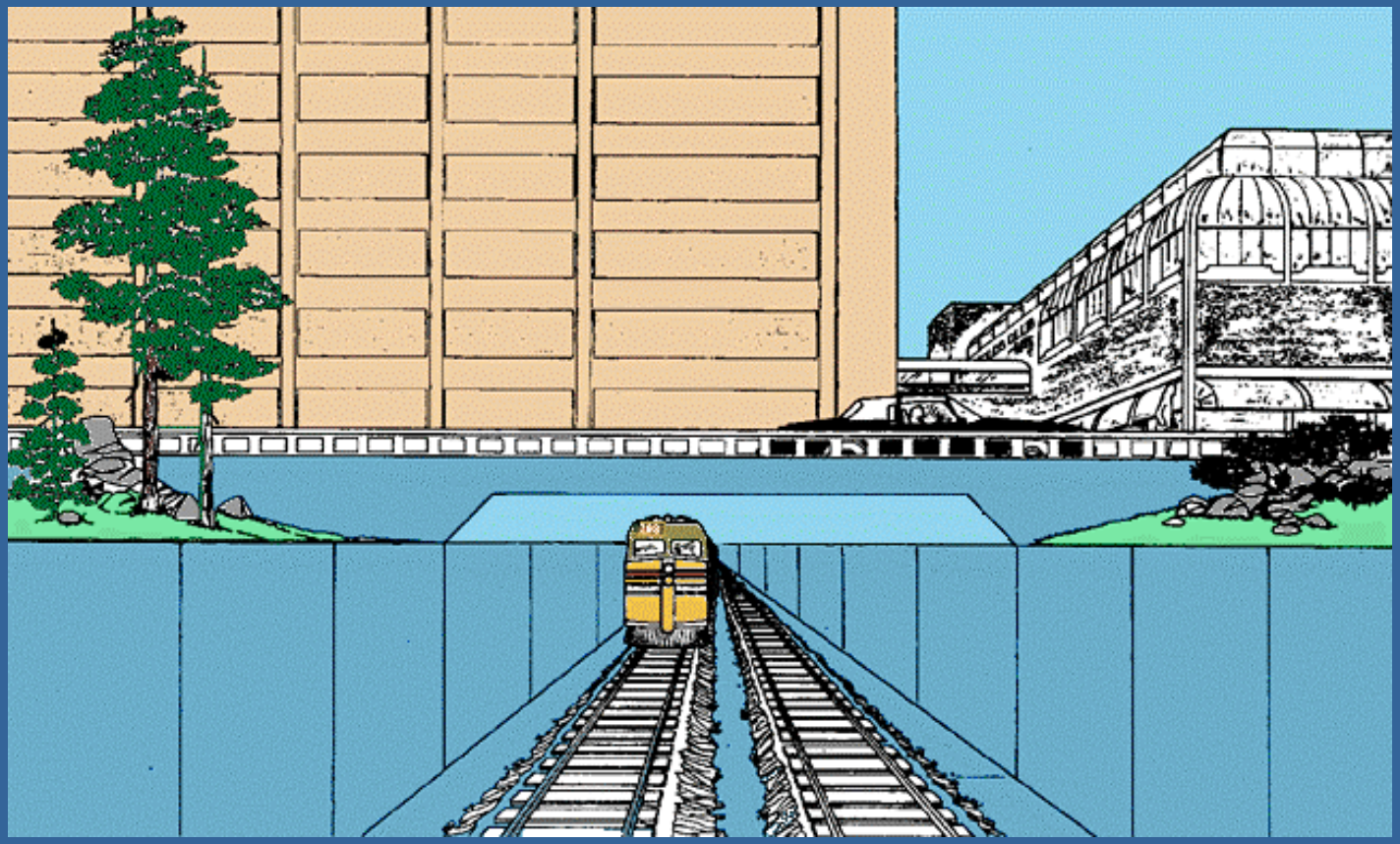
The Problem: Specifics

The Solution

Move Tracks to I-80 Corridor, Cost = $750 million

OR

Drop the Tracks into a Trench á la Alameda Corridor, Cost = $250 million



circa 1980

The First Step: A Public-Private Partnership

ReTRAC Boundaries and Borders

	Public Safety	Traffic Congestion	Air Quality	Economic Growth	Noise Issue
City of Reno	x	x	x	x	x
Washoe County		x	x	x	
State of Nevada		x	x	x	
Union Pacific Railroad		x			
Casino's and Downtown Businesses			x	x	

The Solution: Broad Funding from Stakeholders

- County-wide Sales Tax = ⅛ of a cent
- Downtown Benefit Assessment District—(Sound and Congestion Improvements) = $18 million
- Downtown Hotel Occupancy Tax = 1%
- Federal TEA-21 Grants = $21,093,000 Passed through from NDOT
- Contributions from the City = $2,000,000
- Railroad Settlement: $58+ million

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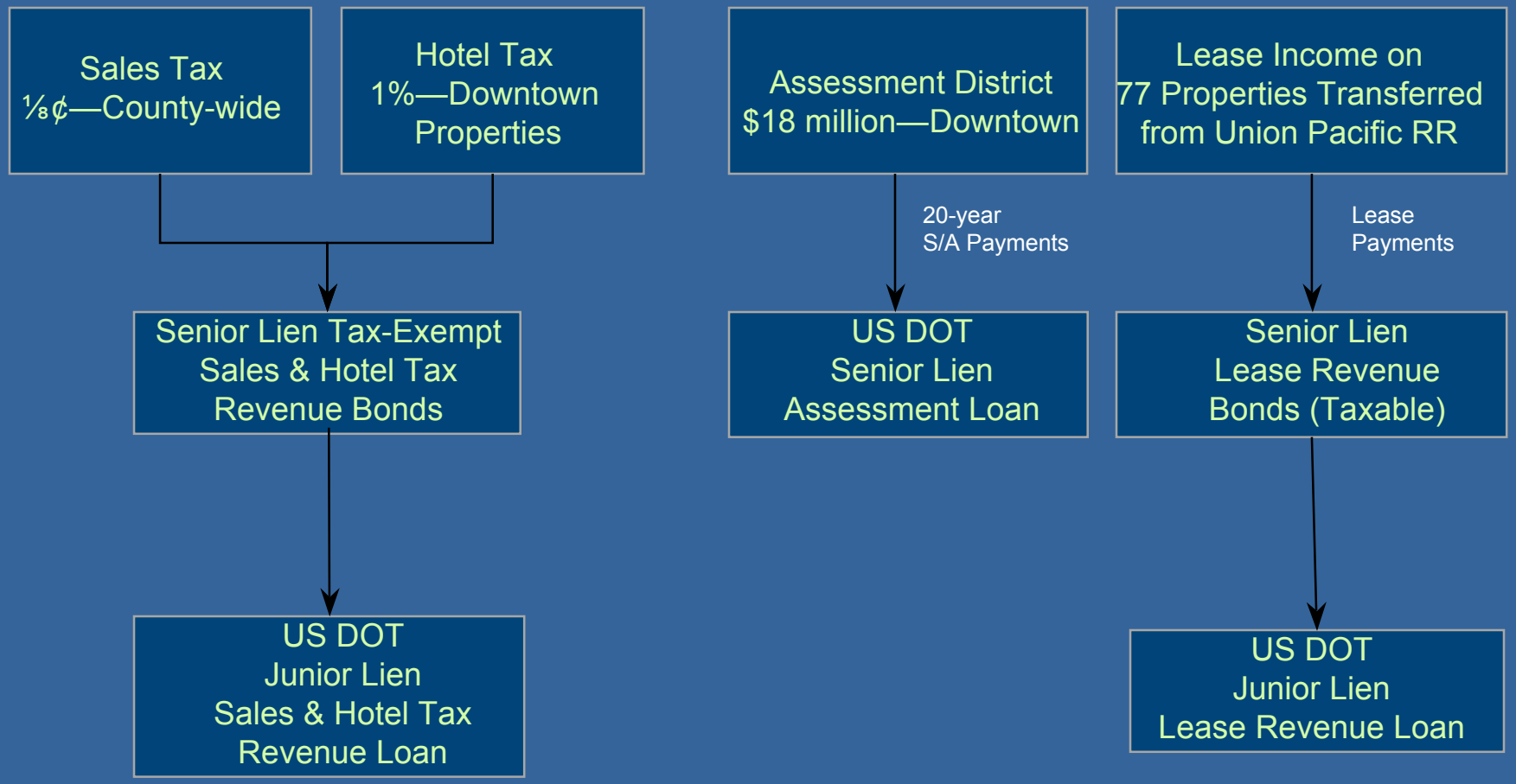
The Plan: Maximum Leverage Obtained



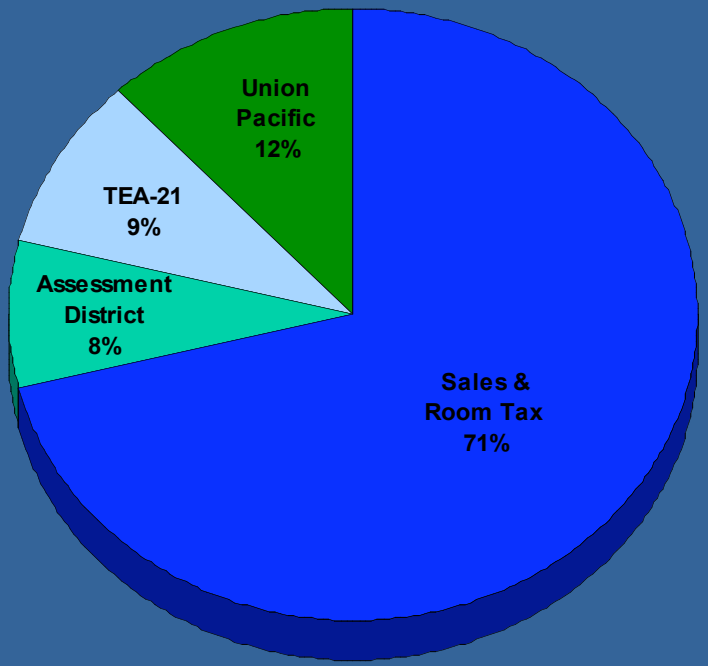
Government in Action: A Combined Effort to Implement the Project

circa 2002

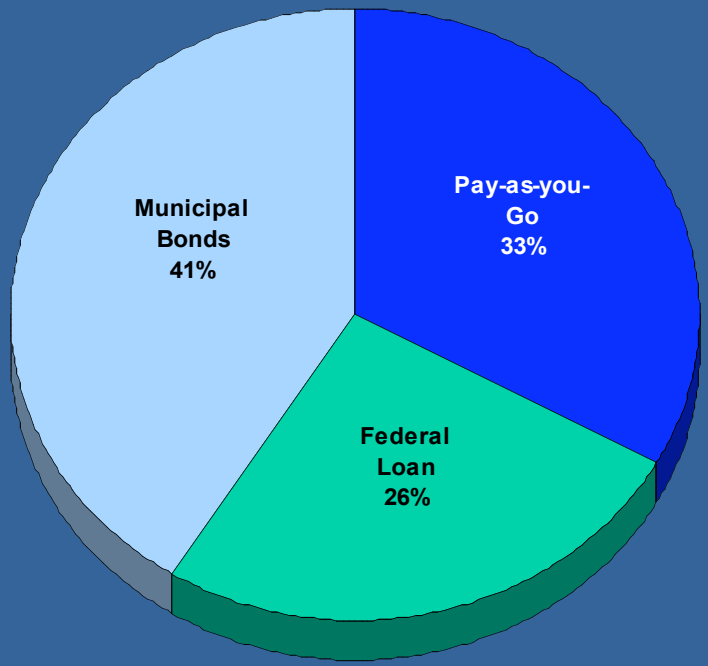
- **Legislature** → Sales and Hotel Tax Measures
- **County** → Sales Tax Implementation
- **City** → Contributed cash, Staff time and Implemented Hotel Tax
- **State** → Added project to STP and passed through a number of TEA-21 grants
- **Federal** → TIFIA loan awarded

Success: Multiple Sources of Revenue Come Together to Fund The Project

Sources of Funds



Financing Vehicles



Lesson Learned

Organizational/Consensus Building—larger educational outreach to minimize project opposition.

Value capture Summary

Limited highway use

- Primarily in high demand areas
- Look for projects that provide benefits
- Local participation needed
- Use as leverage
- Look beyond current practices
- Education of the public

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TOLLING

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Six Programs

- Express Lanes Demonstration Program
- High Occupancy Vehicle Facilities
- Value Pricing Pilot Program
- Interstate System Construction Toll Pilot Program
- Interstate System Reconstruction & Rehabilitation Pilot Program
- Section 129 Toll Agreements

An "Expression of Interest"

- Received by the Tolling and Pricing Team
- Presents the Who, What, Where, When, How, and Why
- Helps the Public entity briefly articulate project request and understand all opportunities
- Helps "Team" manage programs and available slots
- Can be prepared and submitted electronically using template

Tolling Website

http://www.ops.fhwa.dot.gov/tolling_pricing/index.htm

- Programs
- Resources
- Tolling and Pricing Team
- Questions and Comments
- Submit an Expression of Interest

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CONGESTION PRICING

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What is Congestion Pricing?

Congestion Pricing (value pricing)- is a concept that uses monetary incentives to manage congestion.

- Improves Capacity utilization
  - Off peak periods
  - Other Transportation modes

Congestion Pricing in the U.S.

Variable tolls:

1. HOV to HOT Conversion

- Lower-occupancy vehicles allowed on HOV lanes for a fee

2. Express Toll Lanes

- All vehicles (including HOVs) tolled

3. Variable tolls on toll facilities

- Higher tolls during rush hours

4. Area-wide pricing

- Per mile fees

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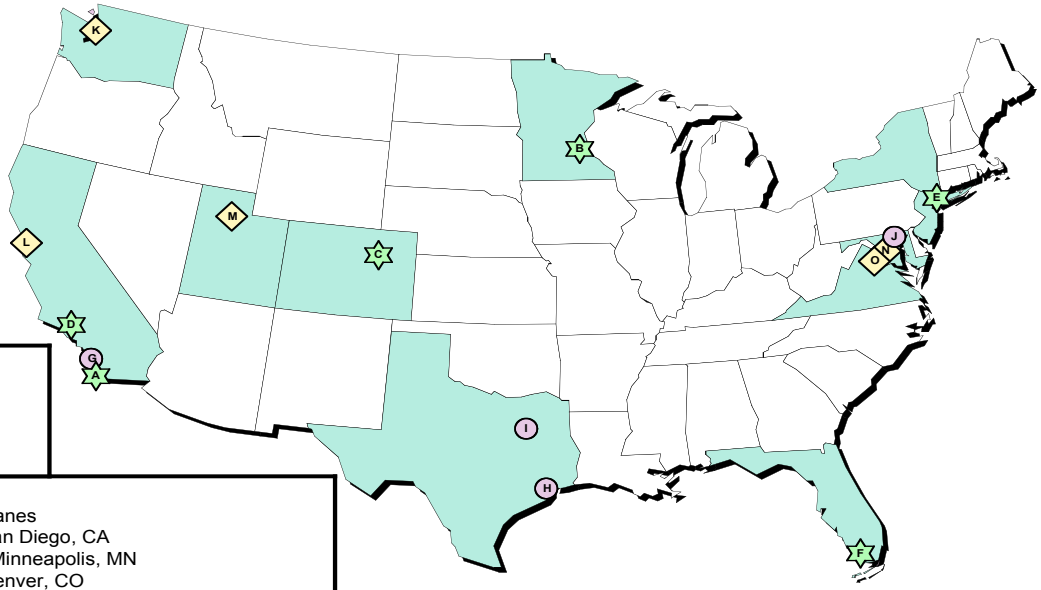
Summary of Key U.S. Road Pricing Projects Operating or Under Development



Legend
- Operational
- Under Construction
- Under Development

Operational
1. HOV to HOT Lanes
   - A. I-15 San Diego, CA
   - B. I-394 Minneapolis, MN
   - C. I-25 Denver, CO
2. Express Toll Lanes
   - D. SR 91 Orange County, CA
3. Variable Tolls on Toll Facilities
   - E. New York area, NY and NJ
   - F. Fort Myers, FL

Under Construction
1. New HOT Lanes
   - G. I-15 San Diego, CA
   - H. I-10 Houston, TX
2. New Express Toll Lanes
   - I. I-635 Dallas, TX
   - J. I-95 Baltimore, MD

Under Development
1. HOV to HOT Lanes
   - K. SR 167 Seattle, WA
   - L. I-680 San Francisco, CA
   - M. I-15 Salt Lake City, UT (Variable Tolls)
2. New HOT Lanes
   - N. I-495 Washington, DC and Northern VA
   - O. I-95 Washington, DC and Northern VA

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HOV to HOT Conversion

San Diego, I-15
8 miles, two reversible lanes
Tolls vary dynamically
Ensures free-flowing traffic

Opened 1998

15,600/day, 66% increase

11,600/day carpool, 66%

$7 mill given to transit

2006 Revenues $1.5 mill

Expenses $1.1 mill

Express Toll Lanes

SR 91, Orange County, CA

Four new lanes in median, 10 miles

Tolls are $1.20 to $9.50

14.1 mill trips 2006 up 11%

2006 revenues $44.2 mill

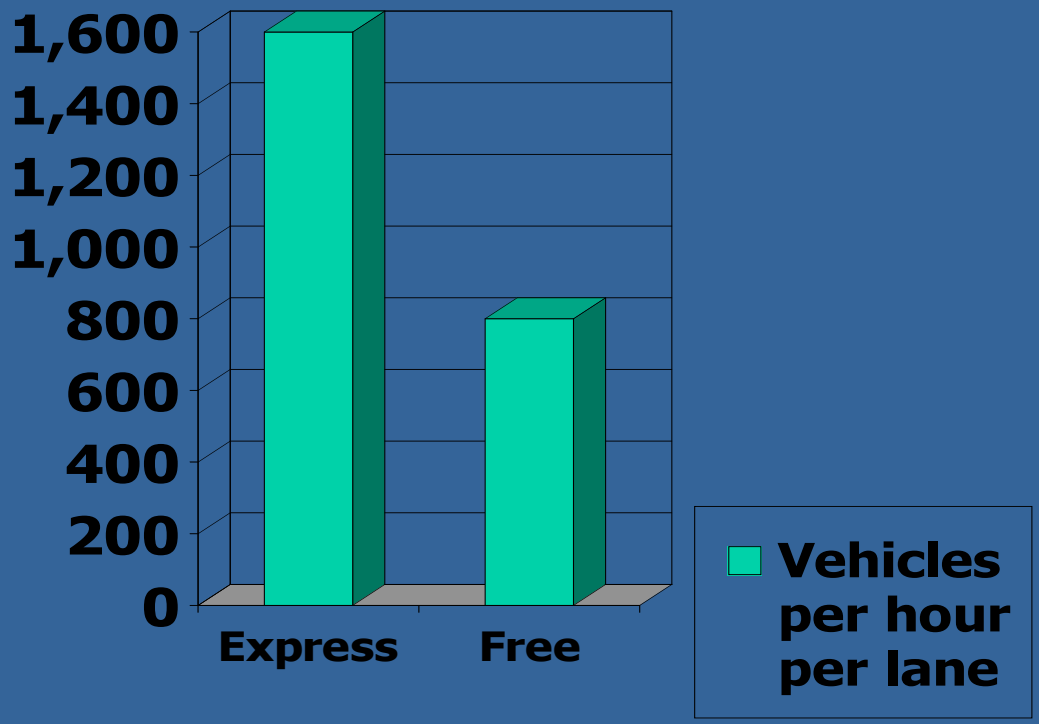
2.8 mill HOV 3 trips up 13%

Lessons: We Waste As Much As Half Our Highway Capacity

SR 91 Express Toll Lanes:

Higher peak hour throughput per lane

Speed 3 to 4 times higher

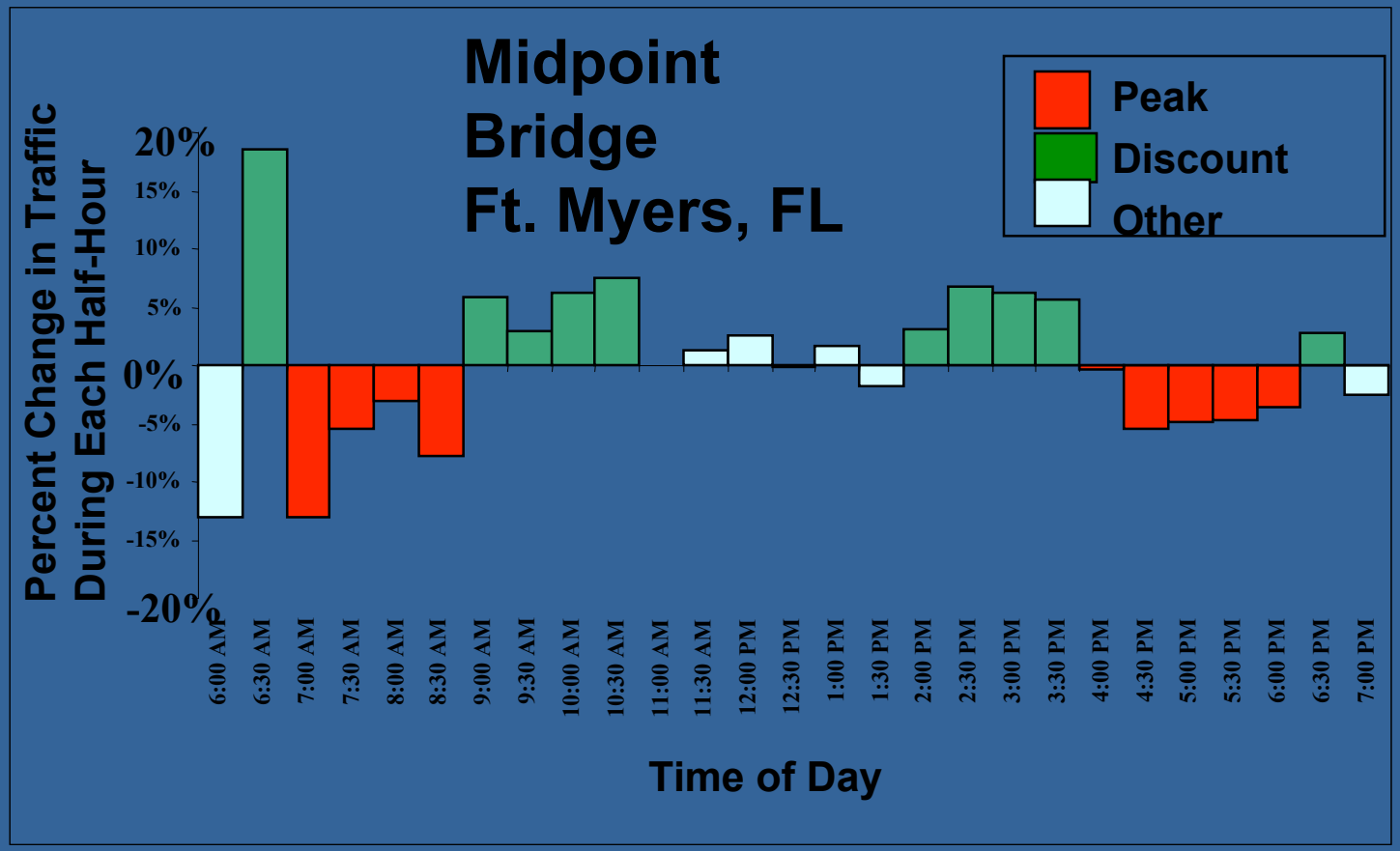


Variable Tolls on Toll Facilities

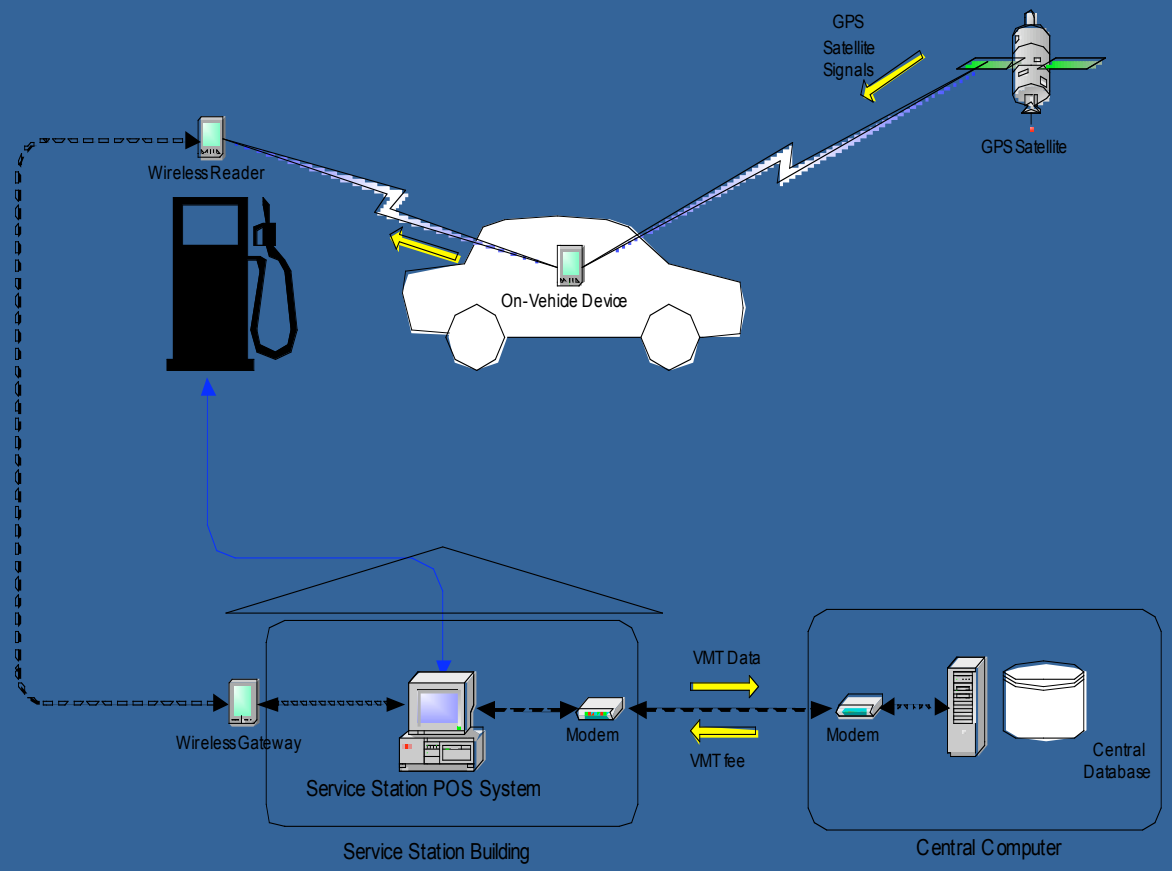
Examples:

- New York's water crossings
- Ft. Myers bridges

Lessons: Travelers Have Flexibility



Area wide Pricing Technology Test: Oregon



Successes

Zones
Mileage counting accuracy
Integration with gas tax
Pump data transmission
User acceptance

Further Development

Transaction speed
Data transfer at pump

Lessons Learned

Vehicle standardization
Fuel station assistance

Key Issues with Pricing Proposals

Public acceptance:

1. Double-taxation

- "Roads already paid for."

2. Equity

- Affordability for low-income groups

3. Feared traffic diversion

- If only freeways are priced

High Performance Highway

Managing traffic flow on *all* lanes of a freeway

Manage demand with pricing

- On congested segments only
- During peak periods only

Complementary strategies

- Transit – express bus, vanpools
- Telecommuting, flextime, etc.
- Traveler Information Systems

Concluding Thoughts

Pricing is a congestion mitigation tool first

- Also can produce revenue

Pricing has worked:

- Facility-based in the U.S.
- Area-wide abroad

"Seeing is believing" --Public opinion can change after pricing is experienced

Public acceptance issues can be addressed

US DOT's Congestion Initiative
Go to:
www.fightgridlocknow.gov

FHWA PPP Go to:
www.fhwa.dot.gov/ppp

FHWA Innovative Finance
Go to :
www.fhwa.dot.gov/innovativefinance/

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